

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001911**Date Inspected:** 28-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** OBG & Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M, 114M, Orthotropic Box Girders (OBG) and Tower, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item Description	WBS	Dwg No.	Status
1 Tower Diaphragm Plate	NA	NA	ZPMC Heat Strightening

New Tower Shop: The Caltrans QA Inspector observed ZPMC performing flame heat straightening operations on tower skin plates for mill distortion. The tower skin plates and heat straightening procedure are identified as skin plate P375 (E), procedure HSR1 (T) 344, revision (0) and skin plate P456 (E), procedure HSR1 (T)-261, revision 0. ZPMC was observed heating the plate manually with a rose-bud torch. Caltrans QA observed ZPMC Quality Control Inspector, Mr. Xu Jin Long monitoring the heat straightening of the plate using a calibrated infra-red temperature indicating device to monitor the heat. The following digital picture illustrates heat straightening in progress.

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## WELDING INSPECTION REPORT

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2 Deck Panel NA NA QA VT

OBG Bay 1: Caltrans QA Inspector performed visual inspection of the completed submerged arc welding (SAW) cover pass welds; partial joint penetration (PJP) welds joining the closed ribs to deck plate panel DP082-001, u-rib U132, welds 1 & 2; u-rib U130, welds 3 & 4; u-rib U131, welds 5 & 6 and DP076-001, u-rib U98 welds 1 & 2, u-rib U101 weld 3. Caltrans QA observed welding overlap, over size welds, underfill and incomplete fusion. These indications observed at the weld were marked in yellow paint stick along the distance from the "Y" axis, starting at the weld start too weld completion end. The weld indications observed were recorded on Caltrans spreadsheet for future reference.

### Summary of Conversations:

As identified within the contents of this report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hasler, Mike	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer

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